



April 27, 2021

To: Abby Steele (USACE) and the Interagency Review Team  
RE: CEMVR-OD-P-2020-1710  
RE: Proposed Manatt's Iowa Valley Mitigation Bank Evaluation Letter

Dear Ms. Steele,

We have reviewed the letter dated April 22, 2021 regarding the IRT not supporting the approval of the proposed development of the Manatt's Iowa Valley Mitigation Bank. The requirements of 33 CFR 332.8 (5)(iii) state, "If the district engineer determines that the proposed mitigation bank or in-lieu fee program does not have potential for providing appropriate compensatory mitigation for DA permits, the initial evaluation letter must discuss the reasons for that determination. The sponsor may revise the prospectus to address the district engineer's concerns and submit the revised prospectus to the district engineer." Therefore, before we submit a revised prospectus, we would request a formal meeting in person with the district engineer to discuss and provide additional information that would negate the reasons for not supporting the proposed bank.

**REASON 1:** This proposed site is surrounded by extensively disturbed areas.

- This statement is generic and could be applied to anywhere in Iowa.
- The State's path to natural resource recovery and diversity lies in developing corridors of recovery throughout the state, especially through and the fringes of urban and industrialized areas.
- Iowa is America's most biologically altered state. Historically, prairie once covered 75 to 80 percent of Iowa's landscape. Now, less than 0.1 percent of that original prairie remains... only about 5% of the state's prairie pothole wetlands remain, and most of the original forest has been lost.
- Less than 3% of Iowa is in public land and a majority of our public land has been clear-cut, plowed, mined and heavily grazed before being protected and allowed to heal.
- In Iowa, 93 percent of the state has been transformed for agricultural purposes.
- In Iowa, hundreds of thousands of acres contain non-native species.
- In Iowa, and other states, there are existing banks that are adjacent to "extensively" disturbed areas and provide ecological enhancement and connectivity to nearby wildlife corridors and habitat.

**REASON 2:** The site is directly adjacent to an active sand pit to the west that still conducts active sand mining, and an old sand pit to the north. Additional sand mining will take place northwest of the site along the Iowa River for the next 15+ years, causing additional ecological disturbance (wetland loss) in this watershed.

- The directly adjacent sand pit (pond) will be closed and reclaimed (per stated standards) prior to the bank going online. Per state standards, the final reclamation requires removal of debris, and disturbed overburden must be graded, smoothed and vegetated prior to the release of bond.
- The active pit (northwest of the site) activities will be > 2000 LF from the proposed wetland mitigation and will have no effect of the performance of the proposed mitigation area.
- The active pit will cause additional ecological disturbance. This is correct. This past and present activity accentuates the **NEED** for wetland restoration in this area and why mitigation for those lost functions and value locally are so important at the proposed site. The proposed action replaces the lost functions and values near a source where so much loss has occurred over the last 70 years, prior to the 1972 Clean Water Act and the Mitigation Rules. The alternative is that these impacts will be mitigated in other areas of the service area (watershed) leaving this area less conducive to long-term, post sand mining ecological diversity.
- Other banks have been located next to closed and active sand pits – (For Example See **Gretna Bottom Mitigation Bank in Nebraska** – approved 2019 and **Hilochee Bank in Florida** – approved 2017). These banks have been shown to effectively mitigate wetland loss in the region, enhance

ecological diversity despite mining activity, and provide pre-mine closure establishment enhancing the opportunity for long-term successful restoration of these areas once the mines are closed.

**REASON 3:** Placing a mitigation site near an ongoing sand mining operation and the abandoned mining pits has many implications for ecological success.

- Please expound on the implications. If there are any implications, they can be addressed in design and in the Long-term management plan.

**REASON 4:** The most successful wetland creation/restoration projects rely on groundwater to achieve hydrology.

- Please provide a reference source for this statement. Wetlands come in all types, some are surface water, some ground water, and some a combination.

**REASON 5:** The adjacent sand/gravel pits have likely lowered the water table significantly which will not contribute favorably to an adjacent wetland.

- There is no data to support that the water table has been lowered significantly. The water level in the ponds mimics the water level of the Iowa River. Any surface water/detention that flows into the pond would actually raise the water table. The hydrology study provided which included a water budget and soil analysis showed that wetland hydrology can be achieved.

**REASON 6:** There is also risk that the pit walls could eventually be compromised, leading to wall failure, causing the wetland bank to fail. The proximity to these types of pits and the continued impacts are a great risk to the success of the proposed bank.

- As needed, this would be addressed in the engineering design and with buffers.
- There is no data to support possible sandpit wall failure. Wendling has been in operation for over 50 years and never experienced a sandpit wall failure. Further, there is no evidence of sandpit wall failure throughout the Iowa aggregates industry.

**REASON 7:** This proposed plan does not provide sufficient evidence that it will restore a hydrologic regime conducive to sustaining forested wetland. These types of forested areas are found within the floodplains of major river systems and are characterized by alternating wet and dry periods that occur within seasonal flooding events. It is questionable that this site will restore a sufficient hydroperiod conducive to sustaining forested wetlands, especially since this project site looks to be outside of and disconnected hydrologically from the floodplains of the Iowa River due to previous impacts that have occurred over the past 60 years.

- This site is in the floodplain of the Iowa River (a major river system).
- The site is designed to be seasonally flooded with alternating wet and dry periods.
- The site is not disconnected hydrologically from the Iowa River or its floodplain, as it is in the floodplain of the Iowa River.
- The floodplain map was provided in the Prospectus -- Exhibit A-11.
- The site will have a surface water connection to an existing wetland/pond and then to the Iowa River.
- Within the Iowa River Corridor near this site, similar landforms currently support Floodplain Forest Wetlands.

**REASON 8:** The proposed main source of hydrology is to be provided by installing a culvert to allow drainage to flow onto the site via an existing ditch.

- Clarification -- the proposed main source of hydrology will be to restore the surface water connection that was diverted and modified in the 1800s with the construction of the road.

**REASON 9:** The mitigation rule states that sites must be self-sustaining once performance standards have been achieved. This site would rely entirely on the county for its water source since the culvert would be their responsibility to maintain. This effectively would be the same as allowing a bank to obtain credits when someone else holds an easement upstream that could have damaging effects on the site. There is no guarantee that the county will maintain this culvert in a condition appropriate to maintain the necessary flowage.

- Clarification - The responsibility of the culvert would be the BANK. The bank would have an easement for the CULVERT and the BANK would be responsible for the maintenance of that culvert in perpetuity. Maintenance of the culvert would be part of the long-term management of the BANK funded through the Long-Term Management Fund.
- The proposal is to install an open bottom culvert that will not only restore the surface water connection but will provide a safe "under the road" by-pass for turtles, snakes and other critters therefore restoring its connection to the uplands.
- The design will include intercepting and restoring the seasonal high-water table which is a perched water table.
- For many banks – surface water from offsite is directed onsite to restore wetland hydrology for example see Cedar River Crossings (CRC)– Approved 2017. The following is from the Hydrology Section of the CRC MBI.

"Hydrology for the CRCWMB will be provided by both seasonal high groundwater and re-directed water from an un-named Creek to its original location. In addition, surface and drain tile runoff waters from adjacent ~~offsite~~ agricultural fields will be captured, treated and used onsite. As part of the overall ecological design, some wetlands have been designed to improve water quality before being allowed to enter the Cedar River. The CRCWMB concept plan design relies on the hydrology data collected on site and a hydrological understanding of the Cedar River and existing onsite wetlands. The final wetland grading plan uses the hydrological analyses such as; re-storing surface flows, lowering of ground elevations to intercept seasonally high groundwater conditions and having surface and groundwater seasonally inundate wetland areas for a sufficient time to meet the hydrology performance standards. "

**REASON 10:** At this time, the success of this proposed wetland site relies largely on the condition of the culvert proposed to be placed as well as the existing condition of the ditch. The culvert would require perpetual maintenance in order to sustain the proposed wetland areas, and if the culvert fails, the sustainability and success of the site is compromised.

- The maintenance of the culvert would be part of the long-term management for the bank. Long term management would be funded through the Long-Term Management Fund set up for the BANK.

**REASON 11:** There are also concerns about rerouting drainage from the ditch that currently outlets to the Iowa River. It appears that the ditch is potentially jurisdictional and rerouting water from the ditch into the wetland may convert the portion of the ditch downstream of the proposed culvert to non-jurisdictional by the reduction of flow which would require stream compensatory mitigation to be offset at another bank site.

- Jurisdiction of the ditch needs to be addressed. That can be done during the MBI process.
- Note - The ditch does not have a defined bed and bank.
- Note - The ditch is maintained as a road ditch.
- Note - Road ditches are non-jurisdictional.

**REASON 12:** The proposed site is fragmented from natural habitats because it is surrounded by sand pits and a roadway.

- The site is currently disconnected from the uplands because of the road. The culvert would restore that connection.
- The "closed sand pit" that was in operation in the 1930s-1980s has naturalized to wetland and shallow pond (see wetland delineation report). This is connected to the Iowa River as well as the adjacent forested floodplain/wetlands.

- This shallow pond as well as the deep pond (former sand pit, now deep pond/lake) has naturalized and is within the Iowa DNR Iowa's Bird Conservation Area of the Iowa River Corridor - identified as very important habitat for migratory birds.

**REASON 13:** Compensatory mitigation projects should not focus exclusively on specific functions such as water quality but rather they should provide a suite of functions typically provided by the impacted aquatic resource within the watershed.

- Please read the Site Selection Watershed Approach Memo previously provided. It addresses this concern in detail.

**REASON 14:** Because this proposed site is so fragmented from the natural landscape, the collection of functions that could exist by the development of high functioning aquatic resources is severely limited.


- Please provide clarification on how this site is more fragmented than other mitigation sites? Iowa has roads every 1/4 to one mile. Are you considering farmland natural landscape?

**REASON 15:** Many different animals depend on wetlands for survival, including, aquatic, semi-aquatic, and terrestrial species. Wetlands are typically naturally separated by terrestrial habitats and these terrestrial habitats allow for semiaquatic and terrestrial species to disperse to other wetlands and habitats they need to ensure their survival. Species dispersal is critical to the heterogeneity of plants and animals and allows for their continued survival. Buffers are critically important to wetland functionality but at this site there can be no true buffer to other habitats.

- Agree buffers are important and the design for this site will incorporate buffers into the design. Additionally, the Iowa River Corridor and its floodplain represents a relevant buffer within proximity to the proposed bank. See Nahant Marsh Mitigation Bank - approved 2019. That site had concerns with adjacent land use and we addressed them through buffer design (Protection from junk cars, railroad spills, industrial runoff, etc. For imagery of the site, see drone footage here and note the adjacent land use [https://www.youtube.com/watch?v=4t6fVjVMm\\_g](https://www.youtube.com/watch?v=4t6fVjVMm_g)).

To summarize, before we submit a revised prospectus, we request a formal meeting in person to discuss and remedy the reasons for the IRT not supporting the proposed bank. We are proud of the successful mitigation banks that we have help developed in Iowa, and hope that we can continue to work together toward a mutual goal of protecting our vital environmental resources. Finally, we are also proud of our ability to leverage exclusively private sector resources to improve Iowa's water quality and natural diversity. Please provide objective responses within 30 days of this letter or inform us as to when we might expect a response.

Sincerely,

  
 Judith E. Joyce, PWS  
 Senior Geomorphologist/Principal  
 Impact7G